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NEW MAPS

EDITED BY THE ASSISTANT EDITOR

For system of listing maps see p. 75 of this volume

MAPS ISSUED BY UNITED STATES GOVERNMENT BUREAUS

U. S. GEOLOGICAL SURVEY

Topographic Sheets

(Including Combined and Special Topographic Maps)

Arkansas-Oklahoma. De Queen Quadrangle.* Surveyed in 1908-1911. 1: 125,000. 34°30′ - 34°0′ N.; 94°30′ - 94°0′ W. Contour interval 50 ft. Edition of June 1913.

California. Bishop Quad.* Surveyed in 1910 and 1911. 1:125,000. 37°30′ - 37°0′ N.; 118°30′ - 118°0′ W. Interval 100 ft. Edit. of May 1913.

Colorado. Leadville Mining District. Surveyed in 1911. 1:9,600. 39°16.0′ - 39°13.6′ N.; 106°20′ - 106°13′ W. Interval 25 ft. Edit. of June 1913.

[Special map on a large scale. Mine prospects and shafts shown. Shafts are identified by red numbers referring to an index printed on the map. The whole of the city of Leadville is included on the sheet; the correct representation on it of the individual houses and built-up areas, hard to obtain for our American cities, is of value anthropogeographically.]

Idaho-Montana. Lolo Quad. Surveyed in 1911. 1:250,000. 47°0′ - 46°0′ N.; 115°30′ - 114°30′ W. Interval 200 ft. Edit. of Oct. 1913.

Illinois. Lincoln Quad.* Surveyed in 1911. 1:62,500. 40°15′ - 40°0′ N.; 89°30′ - 89°15′ N. Interval 10 ft. Edit. of July 1913.

Iowa. Slater Quad.* Surveyed in 1911. 1:62,500. 42°0′ - 41°45′ N.; 93°45′ - 93°30′ W. Interval 20 ft. Edit. of May 1913.

Kentucky Drakesboro Quad.* Surveyed in 1911. 1:62,500. 37°15′ - 37°0′ N.; 87°15′ - 87°0′ W. Interval 20 ft. Edit. of June 1913.

Montana. Marias Pass Quad.* Surveyed in 1910-1911. 1:125,000. 48°30′ - 48°0′ N.; 113°30′ - 113°0′ W. Interval 100 ft. Edit. of May 1913.

[Represents the eastern edge of the Rocky Mountains where the Great Northern R.R. enters them. The northwestern corner is part of Glacier National Park; the topography of this section has already been published on the special map of Glacier National Park listed under ''Montana (b)'' in the *Bull.*, Vol. 44, 1912, p. 398.]

Nevada-California. Lida Quad. Surveyed in 1897-98, 1905 and 1911. 1:250,000. 38°0′ - 37°0′ N.; 118°0′ - 117°0′ W. Interval 100 ft. Edit. of Oct. 1913.

[Includes the northern end of Death Valley (the remainder of which, except for its southernmost end, is shown on the Ballarat and Furnace Creek sheets) and the Goldfield mining district.]

New York. Dannemora Quad.* Surveyed in 1911. 1:62,500. 44°45′ - 44°30′ N.; 73°45′ - 73°30′ W. Interval 20 ft. Edit. of June 1913.

Ohio. Newcomerstown Quad.* Surveyed in 1911. 1:62,500. 40°30′ - 40°15′ N.; 81°45′ - 81°30′ W. Interval 20 ft. Edit. of July 1913.

Ohio-Kentucky. Sciotoville Quad.* Surveyed in 1910-1911. 1:62,500. 39°0′ - 38°45′ N.; 83°0′ - 82°45′ W. . Interval 20 ft. Edit. of June 1913.

Oklahoma. Vinita Quad. Surveyed in 1911-1912. 1:125,000. 37°0′ - 36°30′ N.; 95°30′ - 95°0′ W. Interval 50 ft. Edit. of June 1913.

Ontario-New York. Topographic Map of the Niagara Gorge. Surveyed (in 1912) in cooperation [by the] United States Geological Survey,

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* On these sheets woods are shown in green.

George Otis Smith, Director, [and the] Geological Survey of Canada, Reginald W. Brock, Director. 1:12,000. 43°11.0′ - 43°3.5′ N.; 79°5.5′ - 79°1.8′ W. Interval 10 ft. 1913.

[Admirable large-scale map of the whole Niagara gorge from above Niagara Falls to below Lewiston. The Falls themselves, the rapids above and the Whirpool Rapids below are graphically rendered by means of hachures and fine lines in blue to represent eddies, supplemented by white areas in the general blue tint for water to represent foam and spray. The other elements are represented in the usual manner of the Survey topographic sheets; but here again, due to the large scale, the delineation of city areas (Niagara Falls, N. Y. and Ont., are both shown on the map) is especially valuable.]

Pennsylvania. Stonesboro Quad.* Surveyed in 1911. 1:62,500. 41°30′ - 41°15′ N.; 80°15′ - 80°0′ W. Interval 20 ft. Edit. of July 1913.

Pennsylvania–Maryland. Gettysburg Battlefield and Vicinity. Surveyed in 1885 and 1906-09. 1: 62,500. 40°0′ - 39°30′ N.; 77°30′ - 77°0′ W. Interval 20 ft. Edit. of May 1913.

[Special map prepared for the fiftieth anniversary of the battle of Gettysburg in July, 1913, by combining into one the Fairfield, Gettysburg, Emmitsburg and Taneytown sheets, previously published. See also August *Bulletin* (Vol. 45, 1913, No. 8), p. 616.]

Utah. Tintic Mining District. Surveyed in 1896-1897. Culture revised in 1911. 1:9,600. 39°58′ - 39°54′ N.; 112°8′30″ - 112°5′30″ W. Interval 20 ft. Edit. of July 1913.

Vermont. Woodstock Quad. Surveyed in 1910-1911. 1:62,500. 43°45′ - 43°30′ N.; 72°45′ - 72°30′ W. Interval 20 ft. Edit. of Aug. 1913.

Washington. Cedar Lake Quad.* Surveyed in 1910-1911. 1:125,000. 47°30′ - 47°0′ N.; 122°0′ - 121°30′ W. Interval 100 ft. Edit. of Apr. 1913.

West Virginia. (a) Beckley Quad.* Surveyed in 1911. 1:62,500. 38°0′ - 37°45′ N.; 81°15′ - 81°0′ W. Interval 50 ft. Edit. of June 1913.

(b) Logan Quad.* Surveyed in 1911. 1:62,500. 38°0′ - 37°45′ N.; 82°0′ - 81°45′ W. Interval 50 ft. Edit. of Aug. 1913.

(c) Louisa Quad.* Surveyed in 1911. 1:62,500. 38°15′ - 38°0′ N.; 82°45′ - 82°30′ W. Interval 50 ft. Preliminary edit. of June 1913.

[Map (a) covers the same territory as the northeastern quarter of the Raleigh, W. Va., sheet, map (b) as the northwestern quarter of the Oceana, W. Va.-Va.-Ky., sheet, and map (c) as the southeastern quarter of the Kenova, Ky.-W. Va.-O., sheet, all old sheets on the scale of 1:125,000. A comparison of the new sheets with the corresponding older sheets, especially in the early edition of 1886, brings out the great improvement in mapping methods made by the Survey since that time. The western two-thirds of map (c), which constitute Kentucky territory, are blank.]

CENTRAL AMERICA AND WEST INDIES.

Central America and West Indies. The National Geographic Magazine Map of Central America, Cuba, Porto Rico, and the Islands of the Caribbean Sea. Prepared by the American Bank Note Co. Gilbert H. Grosvenor, Editor. 1:9,000,000. 31° - 6° N.; 100° - 59° W. 10 colors. With inset: (1) [Panama Canal Zone]. [1:700,000]. 9°30′ - 8°45′ N.; 80°5′ - 79°20′ W. Oriented N. 44° W. 5 colors. (2) [Profile of Canal, horizontal scale 1:700,000, vertical scale 1:7,000]. Accompanies ''The Countries of the Caribbean'' by W. J. Showalter, *Natl. Geogr. Mag.*, Vol. 24, 1913, No. 2, pp. 227-249.

[Very serviceable map, primarily of a political nature, of the American Mediterranean region. Commerce is especially emphasized, steamship routes, with distances, railroads, wireless telegraph stations, coaling stations and seats of U. S. consular representatives (consul generals, consuls, and consular agents differentiated) being shown in red. The configuration of the ocean floor is shown by means of isobaths (50, 100, 500, 1,000 and 2,000 fathoms) and tints of blue. With regard to the latter it would have been preferable to begin the markedly deeper tone of blue at the 100 fathom rather than at the 2,000 fathom line; this would have brought out properly the relation of the continental shelf to the true pelagic depths. The Porto Rico Trough might also have been shown graphically rather than by two soundings only. A less cumbersome and equally comprehensive title would have been "Map of Central America and the West Indies."

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* On these sheets woods are shown in green.

But it is mainly because of the manner of its reproduction that this map merits attention here, for, in the field of cartography as practiced by American commercial map publishing firms, it represents a decided advance. This is principally due to the fact that the esthetic requirements of a map have been recognized: the crude type lettering of wax-engraved maps has been replaced by drafted lettering. This has been done without resorting to the laborious—although admirable in its results—lithographic method used by European cartographic establishments: the manuscript drawing has simply been turned into a line cut—the same process as that used for the maps in the *Bulletin*. Another improvement is the greater care given to the colors (faint ruling being used, instead of the halftone and other methods of wax-engraved maps, to obtain areal tints) and, above all, to color registration. Although on the specimen of the map contained in the copy of the magazine accessible to the reviewer the colors do not always register perfectly, a proof of the same map shows that this desideratum can be attained.

Previous efforts of the map department of the American Bank Note Co., notably the physical maps of the continents in Salisbury, Barrows and Tower's Elements of Geography and Modern Geography for High Schools, have shown it to be alive to higher standards. Continued advance along the same lines can do much towards alleviating the present woeful condition of American non-governmental cartography and may afford the possibility of satisfying the demand, increasingly felt in educational and other circles, for better maps made in this country.]

SOUTH AMERICA

Argentina. Sierra de la Lumbrera (République Argentine). 1:1,000,000. 23°42′ - 25°25′ S.; 65°10′ - 64°10′ W. Accompanies, as Fig. 1 on p. 339, "La Sierra de la Lumbrera" by P. Denis, *Ann. de Géogr.*, No. 124, Vol. 22, 1913, July 15, pp. 337-352.

[The Sierra de la Lumbrera is an eastern outlier of the Andes, separated from them by the broad valley of the San Francisco River, to the east of Jujuy.]

AFRICA

Madagascar. (a) Schéma tectonique de la région située entre Tananarive et Mevatanana. 1:1,500,000. [16°53′ - 19°5′ S.; 46°20′ - 47°35′ E.]

(b) Calque tectonique de la région d'Andribe, dressé par le Capitaine de Martonne. 1:200,000. [17°35′ S. and 46°30′ E.]

(c) Carte schématique de la région Mevatana-Majunga. 1:1,500,000. [15°35′ - 17°10′ S.; 45°30′ - 47°20′ E.]

Accompany, as Figs. 1, 4 and 8 on pp. 3, 11 and 22, respectively, "Une mission géodesique à Madagascar" by Capt. Carrier, *La Géogr.*, Vol. 28, 1913, No. 1, pp. 1-26.

Sahara. The Libyan Desert to illustrate a paper by W. J. Harding King. 1: 7,500,000. 33° - 12½° N.; 16° - 34° E. 1 color. Accompanies "The Libyan Desert from Native Information" by W. J. Harding King, *Geogr. Journ.*, Vol. 42, 1913, No. 3, pp. 277-283.

[Valuable contribution to our knowledge of the eastern Sahara, the largest continuous unknown area in Africa. The original parts of the map are based mainly on the information of an Arab, a native of Kufra oasis, who had for about six years been a tax collector among the Bedayat for the Sultan of Darfur. His information relates mainly to the region between Kufra and Darfur and between Darfur and Dongola on the Nile. In the former region the most outstanding feature is the Wadi el Fardi, which is said to rise on the northern slopes of Tibesti, to flow north to Kufra oasis, which it may supply with water underground, and possibly finally to discharge into Siwa oasis. It might thus be considered the eastern counterpart of the Wadi Igharghar in the western Sahara. In the region between Darfur and Dongola a similar dry watercourse, the Wadi Howar, is said to extend from the Jebel Hareeja (15° N. and 22° E.) on the northern confines of Darfur northeast to the Nile below Dongola.]

ASIA

Russian Central Asia. Tektonische Karte des Kalbinski-Gebirges in Westsibirien. Von W. A. Obrutschew. 1: 1,750,000. 50°30′ - 47°50′ N.; 80°0′ - 85°50′ E. 2 colors. Accompanies, as Taf. 25, ''Das Kalbinskigebirge im westlichen Altai in orographischer und geologischer Beziehung'' by W. Obrutschew, *Pet. Mitt.*, Vol. 59, II, 1913, Sept., pp. 128-132.

[The Kalbinski Mountains are a western outlier of the Altai lying beyond the Irtish River. Granite massifs, faults and gold mines are distinguished on the map.]

Turkey in Asia. A. Philippson: Geologische Karte des westlichen Kleinasien, Blatt 2. 1: 300,000. 40°32′ - 38°59′ N.; 28°10′ - 30°26′ E. 25 colors. Accompanies ''Reisen und Forschungen im westlischen Kleinasien: III. Heft: Das östliche Mysien und die benachbarten Teile von Phrygien und Bithynien'' by A. Philippson, *Ergänzungsheft zu Pet. Mitt. Nr. 177,* 1913.

[The third sheet published of this admirable six-sheet geological map of western Asia Minor by Professor Philippson of which Blatt 1 and 3 were listed respectively under ''Asia Minor'' and ''Turkey in Asia'' in the *Bull.*, Vol. 43, 1911, p. 708, and Vol. 44, 1912, p. 559. Twenty-two geological subdivisions are shown. For the topographical map which forms the basis of the geological map see immediately below.]

Turkey in Asia. Topographische Karte des westlichen Kleinasien nach eigenen Aufnahmen . . . entworfen von Dr. Alfred Philippson. 1: 300,000. [Two sheets:] Blatt 5 [with title of whole series]. 37°27′ - 35°54′ N.; 25°57′ - 28°10′ E. 8 colors. Blatt 6. 37°28′ - 35°54′ N.; 28°10′ - 30°24′ E. 8 colors. Justus Perthes, Gotha, 1913. Price of the two sheets together, M. 8.

[The final sheets of a series of which the earlier sheets have been listed under ''Asia Minor'' in previous numbers of the *Bull.*, as follows: Blatt 1 and 3, Vol. 43, 1911, pp. 548-549 (with detailed comment on the whole series); Blatt 2 and 4, Vol. 45, 1913, p. 318. Blatt 5 and 6 show the southwesternmost corner of Asia Minor and the Sporades from Patmos to Rhodes, inclusive.]

AUSTRALASIA AND OCEANIA

New Zealand. Map of the Middle Clarence Valley, Marlborough, New Zealand. (Topography from maps by the N. Z. Lands and Survey Department). [1: 800,000]. [42°0′ - 42°30′ S.; 172°55′ - 174°0′ E.] Accompanies, on p. 226, ''The Physiography of the Middle Clarence Valley, New Zealand'' by C. A. Cotton, *Geogr. Journ.*, Vol. 42, 1913, No. 3, pp. 225-246.

EUROPE

France. Carte des gisements de minerai en fer en Normandie, Anjou et Bretagne. Cliché communiqué par la *Revue scientifique.* [1:1,650,000]. [49°45′ - 47°20′ N.; 3°10′ W. - 0°15′ E.] Accompanies, as Fig. 10 on p. 29, ''Les minerais de Normandie et de Bretagne'' by P. Lemoine, *La Géogr.*, Vol. 28, 1913, No. 1, pp. 27-34.

POLAR

Antarctic. (a) Antarctide Sud-Américaine et Iles Environnantes, des Iles Shetlands du Sud à la Terre Charcot, dressée par Mr. M. Bongrain, Lieutenant de Vaisseau, d'après les travaux les plus récents. Mercator's projection, [equatorial scale, 1:3,700,000; mean meridional scale, 1:1,500,000]. 61° - 70° S.; 77° - 53° W. 1 color. With five insets: (1) Mouillage de l'Ile Déception (Iles Shetlands du Sud). 1: 50,000. 62°55′ S. and 60°38′ W. 1 color. (2) Mouillage de la Baie de l'Amirauté (Ile du Roi Georges). 1: 100,000. 62°6′ S. and 58°37′ W. 1 color. (3) Port Charcot (Ile Wandel). 1: 5,000. 65°4′ S. and 64°2′ W. 1 color. (4) Port Lochroy (Ile Wiencke). 1:20,000. 64°50′ S. and 63°29′ W. 1 color. (5) Port Circoncision (Ile Petermann). 1:4,065. 65°11′ S. and 64°10′ W. 1 color.

(b) Carte Général des Terres Explorées, de la Baie Pendleton à la Terre Charcot. Plan levé par Mr. M. Bongrain, Lieutenant de Vaisseau, à bord du "Pourquoi Pas?". Mercator's projection, [equatorial scale, 1:1,850,000; mean meridional scale, 1:700,000]. 1 color. With two insets: (1) Croquis du Fiord Lallemand. 1: 200,000. [67° S. and 67⅙° W.] 1 color. (2) Croquis des Environs de l'Ile Jenny. 1: 200,000. [67°45′ S. and 68°30′ W.] 1 color.

(c) Carte du Secteur d'Hivernage. Plan levé par Mr. M. Bongrain, Lieutenant de Vaisseau à bord du "Pourquoi Pas?". 1: 200,000. [65°5′ - 65°53′ S.; 65°15′ - 63°40′ W.] 1 color.

(d) Environs de la Station d'Hivernage. Plan levé par Mr. M. Bongrain, Lieutenant de Vaisseau, à bord du "Pourquoi Pas?". 1: 66,666. [65°5′ - 65°37′ S.; 64°24′ - 63°48′ W.] 2 colors.

(e) Ile Petermann (Lund). Plan Levé par Mr. R. E. Godfroy, Enseigne de Vaisseau à bord du "Pourquoi Pas?". 1: 4,065. [65°11′ S. and 64°11′ W.] 1 color.

(f) Port Circoncision (Ile Petermann). Plan des installations au poste d'hivernage levé par Mr. R. E. Godfroy, Enseigne de Vaisseau à bord du "Pourquoi Pas?". 1: 1,000. [65°11′ S. and 64°11′ W.] 1 color

(g) Carte d'Itinéraire de la Campagne d'Été de 1909. Dressée par Mr. M. Bongrain, Lieutenant de Vaisseau à bord du "Pourquoi Pas?". Mercator's projection, [equatorial scale 1: 3,700,000; mean meridional scale 1: 1,500,000]. 62°24′ - 70°0′ S.; 75°40′ - 59°40′ W.] 6 colors.

(h) Carte d'Itinéraire de la Campagne d'Été de 1910. Dressée par Mr. M. Bongrain, Lieutenant de Vaisseau à bord du "Pourquoi Pas?". Mercator's projection, [equatorial scale, 1:11,000,000; mean meridional scale, 1:5,000,000]. 51½° - 72° S.; 123⅔° - 52⅔° W. 5 colors.

(i) Baie de l'Amirauté, Ile du Roi Georges, d'après le levé exécuté par Mr. M. Bongrain, Lieut't. de V'eau. 1: 50,000. 62°6′ S. and 60°37′ W.

(j) [Two maps:] (1) Ile Déception, Shetlands du Sud, d'après le levé exécuté par Mr. Bongrain, Lieut't. de V'eau. 1:50,000. 62°55′ S. and 60°38′ W. (2) Passe du Challenger et Anse des Baleiniers, Ile Déception. 1:10,000. Practically same coordinates as (1). With one inset: Pendulum Cove, Ile Déception. 1:10,000. 62°55′ S. and 60°38′ W.

(k) Shetlands du Sud et Côte Nord de l'Antarctide Sud-Américaine. Carte dressée par M. le Lieutenant de Vaisseau Bongrain. Mercator's projection, [equatorial scale, 1:1,850,000; mean meridional scale, 1:830,000].

Accompany, as Pls. I-XI, respectively, in separate pocket entitled "Cartes," "Deuxième Expédition Antarctique Française (1908-1910) commandée par le Dr. Jean Charcot: Sciences Physiques, Documents Scientifiques," Paris, 1912.

[Important maps embodying the results of Charcot's recent Antarctic expedition of 1908-1910. Maps (a), (g) and (h) are general maps, while (b), (c), (d), (e) and (f) are maps of the various localities that were surveyed in detail. Maps (i), (j) and (k) are copies of the official charts of the French Hydrographic Office (Nos. 5448, 5449 and 5425, respectively) recently issued on the basis of the surveys of the expedition.

Of the general maps, map (a) gives a survey of the whole of West Antarctica (here appropriately termed South American Antarctic). The new land discoveries of the Charcot expedition relate mainly to the islands south of the

Biscoe group, whose insularity and detachment from the mainland of the West Antarctica peninsula it has established. The special field of exploration of the expedition, including Adelaide Island, Alexander I Land (probably also an island) and Terre Charcot are shown in greater detail on map (b). Maps (g) and (h) show the water route of the expedition, map (h) containing the portion of the route which demonstrated that along the 70th parallel no land occurs west of West Antarctica at least as far as 121° W. On both the latter maps ice conditions are shown, distinction being made between dense and loose pack ice and icebergs.]

WORLD AND LARGER PARTS

Alps, Caucasus, Central Asia, etc. (a) Schneegrenzkarte der Alpen. [1: 5,000,000]. [48° - 44° N.; 4½° - 15½° E.] 1 color.

(b) Schneegrenzkarte des Kaukasus. [1:3,750,000]. 44° - 40½° N.; 39¾° - 50° E. 5 colors.

(c) Schneegrenzkarte Mittelasiens. [1:30,000,000]. 50° - 21° N.; 60° - 100° E. 5 colors.

(d) Schneegrenzkarten Skandinaviens. [1:20,000,000]. [72° - 53° N.; 4° - 32° E.] (1) Klimatische Schneegrenze und Juliisothermen. 2 colors. (2) Orographische Schneegrenze und Niederschlagsmengen in Zentimetern. 5 colors.

(e) Isochionen der Nordpolarländer.[Mercator's projection; equatorial scale, 1: 245,000,000]. [Zone between 81° - 50° N.] (1) Isochionen der Nordpolargebiete. 1 color. (2) Juliisothermen der Nordpolargebiete. 3 colors.

Accompany, as Taf. 1-3, ''Die Schneegrenze in verschiedenen Klimaten'' by V. Paschinger, *Ergänzungsheft zu Pet. Mitt. Nr. 173,* 1912.

[Suggestive maps of the snow limit in various parts of the world. On maps (a), (b) and (c), diagrammatic crest lines are used to differentiate between the various altitudes of the snow lines in the mountains represented. On the map of the Caucasus (b) in addition is shown the extent of the various climatic regions, on the map of Central Asia (c) the precipitation, after Supan, and the July isotherms, after Hann. Map (e_1) shows the lines of equal snowfall for the Arctic regions, map (e_2) cold and warm currents in addition to the July isotherms.]

World. Eisenerzkarte der Erde nach dem Stande der Eisenerzforschung i. J. 1911, entworfen von Max Eckert. [Eckert's equivalent projection,] 1:90,000,000. 5 colors. Accompanies as Taf. IX, ''Die Eisenvorräte der Welt'' by M. Eckert, *Geogr. Zeitschr.,* Vol. 19, 1913, No. 5, pp. 266-285.

[Suggestive map of the iron ore resources of the world. Distinction is made between countries whose iron ore resources have been investigated (1) practically completely, (2) partly, (3) insufficiently or (4) not at all. Appropriate symbols indicate the grade of ore mined in the chief producing areas (5 symbols), the amount of ore mined in (8 symbols), and the resources of, each country. The latter element is represented by colored circles—blue for countries for which the statistics are known, red for those for which they are only estimated—whose areas bear a definite ratio to the amount designated.]

World. Übersicht der erdmagnetischen Observatorien 1913, zusammengestellt von Prof. Dr. Karl Schering. Mercator's projection: equatorial scale, 1: 80,000,000. With inset: Erdmagnetische Observatorien in Europa (mit Ausnahme von Russland). 1:20,000,000. 60° - 35° N.; 20° W. - 35° E. 1 color. Accompanies, as Taf. 30, ''Karte der erdmagnetischen Observatorien'' by K. Schering, *Pet. Mitt.,* Vol. 59, II, 1913, Sept., p. 146.